

Reviews changes

- Figures 1,2,6,7,9,10,11,12,14,15,16 and 18 were updated to improve readability.
- It is clarified in section 7.1.2 how Hill's and Floquet's eigenvalues results for a 3-bladed rotor are expressed from the rotating to the non-rotating frame. This methodology also applies for the 2-bladed rotor results.
- It is explained in the end of the Conclusion section 9 how the stability methods that we investigated can be applied to include additional degrees of freedom, such as the blade edgewise deflection amplitude. The same procedure of including tower modes with corresponding modal amplitudes as extra degrees of freedom can be applied.
- The computed frequencies are not the natural frequencies anymore but damped frequencies which have been corrected throughout the paper.
- We now clarify the limitations of the Stig Øye dynamic stall model in comparison to a more accurate model, such as the Beddoes-Leishman which includes the Theodorsen effect of shed vorticity. We also mention that the operational point is not actually in the fully inviscid region but in a partially attached flow region.
- We added in section 4.2 for Hill's method a description of the periodic eigenmodes which correlates to the periodic eigenmodes description for Floquet's theory in section 5.4.
- We added in section 4.3 the mathematical procedure how the principal eigenvalues are selected according to Hill's method and explain the procedure.
- We include more references for Floquet's theory in section 5.4.
- We explain in section 5.4, Skjoldan's and Hansen's, 2009 methodology to select the principal eigenvalues to deal with the indeterminacy of modal frequencies. This explains the improvement in the principal eigenvalues selection through the participation factor instead.